

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

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Syphilis Cases Continue to Rise in Los Angeles

Los Angeles now ranks fourth in the nation for the number of new syphilis cases according to the CDC's Morbidity and Mortality Weekly Report published November 1, 2002.¹ As of October, the total number of syphilis cases reported for the year 2002 had exceeded the totals reported in 2000 and 2001. Of the 410 early syphilis cases reported as of October this year, 61% occurred in men who have sex with men (MSM), and 60% of these men were HIV positive. In contrast, syphilis rates in women have declined steadily since 2000.

The large number of syphilis cases occurring among HIV-positive MSM is an indication of unsafe sexual practices. The risk of HIV transmission and/or acquisition is increased 5-fold among those having a concurrent genital ulcer disease

Of the 410 early syphilis cases reported as of October this year, 61% occurred in men who have sex with men (MSM), and 60% of these men were HIV positive.

such as syphilis. There is growing concern that seroincidence rates of HIV will rise as a direct result of untreated syphilis.

Syphilis is caused by the bacteria *Treponema*

pallidum. This organism is transmitted by contact with infected lesions during sexual contact. Virtually any type of sexual activity where contact with lesions occurs put one at risk for the acquisition of syphilis. The use of condoms significantly decreases the risk of syphilis however condoms must be used during oral sex in addition to anal and vaginal sex in order to prevent transmission to the mucous membranes of the mouth. Lesions caused by

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More Children with HIV Infection Reported in Los Angeles County: A Call for Increased Awareness

As of November 1, 2002, 18 new cases of HIV acquired during childhood (less than 13 years of age) were reported to the Pediatric Spectrum of HIV Disease (PSD) project of the Los Angeles County Department of Health Services. While this number exceeds the annual total reported for each of the last 3 years (11 in 1999, 14 in 2000, and 7 in 2001), none of the new cases were among babies born this year. Eight of the children were born in 2000 or 2001. Only one of these mothers (from out of state) had been identified as HIV-infected during pregnancy and given anti-retroviral medication to prevent transmission. The other mothers were identified after

the birth of their child. One mother delivered 2 infected babies and was not diagnosed during prenatal care because she refused HIV testing believing she was not at risk for HIV. One additional mother also refused testing during prenatal care believing she was not at risk for HIV. Two mothers tested HIV negative during their pregnancies indicating they were either in the window period for infection or they were infected during their pregnancy. One mother had no prenatal care and the baby was tested for HIV at birth, however test results came back too late to initiate ZDV to either the mother or baby to prevent transmission. One mother had unknown prenatal care and was diagnosed as HIV-infected only after the baby became sick and died.

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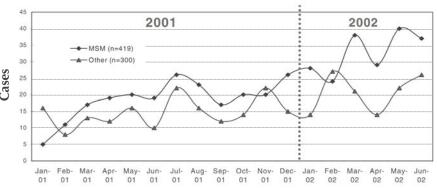
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Syphilis Cases (from page 1)

Early Syphilis by Sexual Orientation & Month of Diagnosis, January 2001 through June 30, 2002 (N = 719)



Source: LAC STD Program

Updated 11/05/2002

syphilis contain significant amounts of the treponemal organism; as such, condoms must cover the entire affected area in order to be effective in prevention. Persons may also acquire syphilis by touching the skin lesions that occur during secondary syphilis, though this is rare. Untreated, syphilis will progress beyond the symptomatic stages to a latent period that occurs upon resolution of the skin lesions of the secondary stage. Patients will have no symptoms of the disease and will be less infective to others. The long term effects of untreated syphilis can be fatal and include: aortic aneurysm, aortic valve disease, tabes dorsalis, visual loss, slurred speech, tremors, reflex abnormalities, and gummatous lesions of the brain and spinal cord. Syphilis may be transmitted from mother to child during pregnancy. The risks to the

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ANTIBIOTIC RESISTANCE INFORMATION CORNER

The Battle Against Emerging Antibiotic Resistance: Should Fluoroquinolones Be Used to Treat Children?

Lionel A. Mandell, Lance R. Peterson, Richard Wise, et al. Clinical Infectious Diseases 2002; 35:721-727

This article has an excellent overview of the problem of pneumococcal resistance in general, and to penicillin and fluroquinolones (FQ) in particular. After summarizing the history and evolution of the problem of multi-drug resistant pneumococci, there is a cogent and rational statement that FQ usage in pediatrics should be very cautious and slow to expand. The authors offer excellent support for this opinion. First, the majority of antibiotic use for URI in children is inappropriate: most such infections are viral (75% of pediatric visits for acute URI can be manged without an antibiotic on first office visit). Second, there is already a reservoir of FQ resistance genes and the mutations are relatively rapid in appearance. Third, the treatment of a closed space infection (otitis media) intrinsically leads to high risk of mutations due to lower antibiotic levels. Finally, FQ use in children may lead to increasing resistance because children have a higher rate and higher-density pneumococcal colonization than adults.

Syphilis Cases (from page 2)

fetus include and are not limited to: stillbirth, prematurity, growth retardation, osteochondritis, hepatitis, meningitis, dental defects, ocular abnormalities, rash, rhinitis, anemia and thrombocytopenia.

The Los Angeles County Department of Health Services (DHS) and the Centers for Disease Control and Prevention (CDC) is strongly urging providers to screen men who have sex with men for syphilis using the rapid plasma reagin (RPR) test every 6 months, at minimum, and preferably every 3 months for those who are sexually active with multiple partners. In addition, DHS encourages providers caring for men who have sex with men to consider syphilis in the differential diagnosis of genital ulcer disease and dermatologic conditions.

For more information please visit www.lapub-lichealth.org/std or call 213-744-3070. The CDC guidelines for treatment of syphilis and other STDs can be found at www.cdc.gov.

REFERENCES

1. CDC. Primary and Secondary Syphilis - United States, 2000-2001. MMWR 2002;51(43):971-3. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm5143a4.htm

The Primary Syphilis Chancre

The primary stage of syphilis is characterized by the presence of one or more painless chancres located on the penis, mouth, anus, or vagina. Depending on the sexual exposure site of the person, this chancre may or may not be noticed by the patient. Lesions located in the anal or vaginal area often go undetected. This emphasizes the physician's role in doing a thorough physical examination for persons at risk for syphilis and other sexually transmitted diseases. This lesion/ulcer has a clear base and an indurated margin. These lesions heal spontaneously in 3 to 6 weeks. Modest enlargement of inguinal lymph nodes may be present in cases of genital lesions.

Dermatologic Symptoms of Syphilis

The secondary stage of syphilis is heralded by skin and systemic symptoms and represents the dissemination of the treponemal organism. These symptoms occur 4 to 10 weeks after the initial appearance of the primary syphilitic chancre. The most common finding is a diffuse maculopapular rash located on the truncal areas as well as the extremities including the palms of the hands and the soles of the feet. These papules are reddish brown in color and are generally scaly or smooth. Condyloma lata is the term used for grayish skin lesions occurring in warm mucous membrane sites. Spotty alopecia may also be seen as a skin manifestation.

Syphilis and HIV/AIDS

Persons with co-occurring HIV and syphilis have a greater risk of development of neurosyphilis than do HIV negative persons. A high index of suspicion for neurosyphilis should be employed when caring for HIV positive patients with syphilis. HIV positive persons with visual symptoms, headaches, or other neurologic symptoms should be referred for lumbar puncture to rule out neurosyphilis. Those with visual symptoms should be referred for an ophthalmologic exam. Treatment failures occur more often in HIV positive patients for unclear reasons and thus careful follow-up of patients is warranted using RPR at 3, 6, 12, 18, and 24 months after treatment. Serologic syphilis testing (using the RPR) among HIV infected syphilis cases may be variable. Persons with HIV may have a delayed time to RPR positivity, thus persons presenting with a primary syphilitic chancre may have a low or negative RPR titer. This test should be repeated after empiric treatment in 2-3 weeks.

Perinatal Hepatitis B: Vaccine Recommendations

Hepatitis B virus (HBV) infection is a serious, yet preventable, health problem in the United States. It is estimated that between 4,000 and 6,000 deaths occur annually from HBV-related chronic liver disease and that HBV infection is a leading cause of liver cancer in the United States.

The greatest risk of chronic infection and death from HBV-related chronic liver disease occurs from the transmission of HBV from mother to infant during the perinatal period. Within Los Angeles County, it is estimated that 1,100 hepatitis B surface antigen (HBsAg) positive women give birth each year and that between 20-90% of these infants

The greatest risk of chronic infection and death from HBV-related chronic liver disease occurs from the transmission of HBV from mother to infant during the perinatal period.

would become infected without prophylaxis. Among infected infants, up to 90% will become chronically infected. As chronic carriers of

infection, these individuals will pose a lifelong threat of infection to their sexual partners, children, and other household contacts. Yet the vast majority of these potential infections, 90-95%, may be avoided through appropriate maternal screening and infant immunoprophylaxis.

State law has required HBsAg serological screening of pregnant women since 1991. In addition, physicians, laboratories, hospitals, and other health care professionals are required by law to report HBsAg-positive persons to the local health department. HBsAg-positive pregnant women in Los Angeles County are reported to the Immunization Program's Perinatal Hepatitis B Prevention Unit. In 2001, 820 HBsAg-positive pregnant women were reported, but it is estimated that the Unit only receives an estimated 70% of expected reports of births to HBsAg-positive mothers. Health care providers and laboratories are mandated to report all HBsAg-positive results for women of childbearing age. Hospitals and birthing centers are required to report all births to HBsAgpositive mothers to the Unit.

Once notified, the Perinatal Hepatitis B Prevention Unit's case managers contact the pregnant woman and provide linguistically and culturally appropriate health education on hepatitis B, its transmission, and prevention. The case manager follows the family to ensure that the infant is immunized on time and receives post-vaccination serological screening to verify immunity. The case manager also ensures that household members are referred for serological screening and immunization, if susceptible.

The HBsAg status of pregnant women must be reviewed at the time of admission for delivery. Women whose HBsAg status is unknown need to have a stat HBsAg done in order to manage properly the infant's care. The table below reviews the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP) recommendations for immunoprophylaxis of infants born to mothers whose HBsAg status is positive or unknown at the time of delivery.

Recommendations

The ACIP, the American Academy of Pediatrics (AAP), and American Academy of Family Physicians (AAFP) are encouraging health care providers to administer the first dose of hepatitis B vaccine to all infants soon after birth and before hospital discharge. Hepatitis B vaccine administered before hospital discharge should minimize the risk of infection due to errors in maternal HBsAg testing or reporting, or from exposure to persons with chronic HBV infection in the household, and can increase the likelihood of completing the vaccine series. Infants whose mothers are HBsAg-positive should receive hepatitis B vaccine and hepatitis B immune globulin (HBIG) within 12 hours of birth. Infants whose mothers' HBsAg status is unknown at birth should receive hepatitis B vaccine within 12 hours of birth and if the mother is found to be HBsAg-positive, infants should receive HBIG as soon as possible but not later than 7 days of age. Premature infants weighing less than 2,000 grams at birth whose mothers' HBsAg status is positive or unknown should receive both hepatitis B vaccine and HBIG within 12 hours of birth.

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Perinatal Hepatitis B (from page 4)

For more information on hepatitis B, the Perinatal Hepatitis B Prevention Unit, or reporting requirements, contact the Perinatal Hepatitis B Prevention Unit at (213) 351-7400.

This information is available on the Immunization Program web site at: http://www.lapublichealth.org/ip/vpds/perinatalhepB.pdf

Recommended Schedule of Hepatitis B Immunoprophylaxis for Infants Born to Mothers Whose Hepatitis B Surface Antigen Status is Positive or Unknown at the Time of Delivery

	Hepatitis B Immunoprophylaxis							
Mother's HBsAg Status	Hepatitis B Immune Globulin (HBIG)	Hepatitis B vaccine #1	Hepatitis B vaccine #2	Hepatitis B vaccine #3	Hepatitis B vaccine #4			
Infant born to HBsAg- positive mother	Within 12 hours of birth	Within 12 hours of birth	1-2 months of age	6 months of age*				
Infant born to mother whose HBsAg status is unknown [†]	Within 7 days of birth if mother tests positive	Within 12 hours of birth	1-2 months of age	6 months of age				
Premature infant weighing <2,000 grams born to HBsAg-positive mother	Within 12 hours of birth	Within 12 hours of birth [‡]	1 month of age	2 months of age	6 months of age*			
Premature infant weighing <2,000 grams whose mother's HBsAg status is unknown [†]	Within 12 hours of birth [§]	Within 12 hours of birth ^{‡§}	1 month of age	2 months of age	6 months of age			

^{*} After completion of the vaccine series, serologic testing for HBsAg and anti-HBs is recommended at 9 to 15 months of age.

Table adapted from:

CDC. General Recommendations on Immunization. Special Situations: "Vaccination of Premature Infants". MMWR Recommendations and Reports, Feb 8, 2002, Vol. 51, No. RR-2, 18. www.cdc.gov/mmwr/preview/mmwrhtml/rr5102a1.htm

CDC. Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States Through Universal Childhood Vaccination: Recommendations of the ACIP APPENDIX A: Postexposure Prophylaxis for Hepatitis B. MMWR Recommendations and Reports, Nov 22, 1991, Vol. 40, No. RR-13, 21-25. www.cdc.gov/mmwr/preview/mmwrhtml/00033455.htm

[†] Test mother while hospitalized.

[‡] This initial hepatitis B vaccine dose should not be counted towards completion of the hepatitis B vaccine series, and three additional doses of hepatitis B vaccine should be administered beginning when the infant is age 1 month.

[§] Premature infants weighing less than 2,000 grams at birth who are born to mothers with unknown HBsAg status must receive immunoprophylaxis with hepatitis B vaccine and HBIG \leq 12 hours after birth unless mothers' HBsAg test result is available in < 12 hours.

Methylmercury in Fish Poses Health Risk

The evidence to support the role of fish as an important part of a healthy diet has grown rapidly over the last several years. Perhaps one of the most noteworthy findings has been that eating fish regularly can actually help prevent heart disease.

Unfortunately, there may be a downside to eating too much fish too frequently: possible exposure to methylmercury. Mercury—a naturally occurring element—accumulates in rivers and oceans. In the water, it is converted into methylmercury and taken up by fish.

Whether or not eating fish contaminated with low levels of methylmercury presents any real health risk is still unclear. Studies report conflicting conclusions. While some find it to produce no significant effects; others suggest that it does, particularly in sensitive populations. There is some evidence, for example, to show that low level exposure to methylmercury may adversely affect the developing brain of fetuses, causing later problems with memory, attention and language.

Because of concerns about its potential toxicity, the Food and Drug Administration has set limits on the amount of methylmercury that commercial fish can contain. However, some types of fish sold in markets and restaurants come very close to those limits, and may pose a risk if eaten in excess.

For this reason, the Food and Drug Administration (FDA) has issued an advisory recommending that pregnant women, nursing mothers and young children not eat shark, swordfish, king mackeral, and tilefish because these fish often contain high levels of methylmercury. Women of childbearing age who may become pregnant are also advised to avoid these types of fish. Moreover, the FDA recommends that these groups of women limit their consumption of other varieties of commercially purchased fish and shellfish to 12 ounces (cooked weight) per week.

The California Department of Health Services has issued additional guidelines for noncommercial, or sport, fishing. The agency advises pregnant women, women of childbearing age who may become pregnant and nursing mothers to limit their consumption of fish caught by family and friends. Fish caught in freshwater should be limited to 1/2 pound* per week; fish caught in the ocean or saltwater bays should be limited to 1 pound* per week. Children less than 6 years old should not eat more than 3 ounces* of freshwater fish each week.

Pregnant women, nursing mothers, young children and women of childbearing age who may become pregnant are advised to avoid eating shark, swordfish, king mackeral, and tilefish.

However, before eating any non-commercially caught fish, checking for sport fishing health advisories is recommended. For example, because of elevated levels of mercury, a current advisory warns women who are pregnant or may become pregnant within a year, nursing mothers, and children under age 6 against eating any fish caught in Lake Pillsbury in Lake County, California. It also warns other adults and older children to eat fish from the lake only occasionally. (The absence of an advisory about fish in a specific area, however, does not necessarily mean they are safe to eat. In California, fish safety has not yet been completely evaluated.)

Patient Recommendations

A few simple precautionary measures can help reduce exposure to methylmercury in fish. Encourage patients to vary their choice of fish, choosing smaller varieties over larger ones whenever possible (smaller fish tend to have lower concentrations of methylmercury as well as other contaminents). Advise them to remove the skin, trim away visible fat and gut the fish before cooking them. Also, encourage them to select a cooking method, such as baking, steaming or grilling, which allows the juices to drain.

Instruct patients who sport fish to vary their fishing location, and to check local advisories for warnings about specific toxin problems. Fish advisories are available by contacting the Office of Environmental Health Hazard Assessment by phone at 916-327-7319 or by checking their website at www.oehha.ca.gov/fish.html. The California Department of Fish and Game also publishes a booklet called "Sport Fishing Regulations" that contains health advisories. The booklet is available wherever fishing licenses are sold.

*uncooked weight

More Children with HIV Infection (from page 1)

The remaining 10 HIV-infected children were born before the year 2000: 1 in 1999, 4 in 1997, 4 in 1992 and 1993, and 1 in the early 1980s who was possibly infected due to a contaminated blood transfusion. Three were foreign born. None of the mothers were identified during pregnancy or given antiretroviral medication.

Prenatal HIV Testing

While both nationwide and locally, mother-to-infant transmission of HIV has declined, new cases of pediatric HIV infection are still being reported. Women with no or unknown prenatal care are at the highest risk of HIV and HIV transmission. Women who refuse HIV testing during their prenatal care need to be counseled that all women who get pregnant are at risk for HIV despite their marital status or number of sexual partners. HIV testing and counseling should be part of routine prenatal care for all women. It is vital for prenatal care providers to encourage all their patients to get tested.

The FDA just recently approved a rapid HIV test called The OraQuick Rapid HIV-1 Antibody Test. Using less than a drop of blood, this new test can quickly and reliably detect antibodies to HIV-1

in as little as 20 minutes. This test now allows for rapid HIV testing during labor and delivery for woman with unknown or no prenatal care, or for those without evidence that an HIV test had been offered during pregnancy. As such, this test is an effective means of identifying HIV+ women at labor and delivery, allowing physicians to offer treatment and prevent mother-infant HIV transmission. The CDC is currently studying the best ways to offer HIV testing and counseling to women during labor and delivery.

Because children can live many years without showing obvious signs of HIV, it is important for pediatricians to keep HIV in mind when evaluating children. It is also important for clinicians treating HIV+ men to encourage their patients to disclose their HIV status to their partners, particularly if they are pregnant.

REFERENCES

1. An overview of the Pediatric Spectrum of HIV Disease (PSD) project and the 2001 review of cases was discussed previously in The Public's Health, April 2002, Vol.2, No. 4, available at: www.admin.lapublichealth.org/wwwfiles/ph/ph/ph/TPH_April_2002_revpdf

For more information, please contact Dr. Toni Frederick or Dr. Getahun Aynalem of the PSD Project at (213) 250-8666.

Calendar

Journal Article Review and TB Case Presentations

This conference will feature difficult or complex cases for audience discussion along with a Journal Article Review.

Date: Friday, December 20, 2002 Time: 8:30 a.m. – 11:30 a.m. Place: TB Control Program

2615 South Grand Avenue, Room 506A

Los Angeles, CA

Epidemiology and Prevention of Vaccine-Preventable Diseases

This 4-part series is designed to provide updates on immunization schedules, standard immunization practices, contraindications, vaccine-preventable diseases, and vaccine management and safety. Visit www.lapublichealth.org/ip/iptrain.htm for more information.

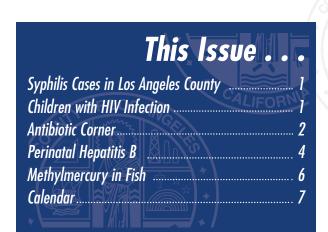
Dates: February 13, 20, 27, and March 3, 2003

'TIS THE SEASON FOR COLDS AND FLU

The Los Angeles County Department of Health Services would like to remind physicians that antibiotics are both inappropriate and potentially problematic for the treatment of colds and influenza. While patients might request antibiotics, fulfilling this is often unnecessary. Instead, studies have shown that communication by the physician is <u>more</u> influential to patient satisfaction than receiving an antibiotic.

Antivirals are the appropriate choice in the treatment of influenza. However, their effectiveness relies on early diagnosis and treatment. Current information describing antivirals (including their effectiveness for prophylaxis) is available at: www.cdc.gov/ncidod/diseases/flu/fluviral.htm

Plus, influenza often circulates beyond winter. Last season, influenza peaked in Los Angeles County during March. As such, physicians are encouraged to continue providing flu shots particularly for their patients who are at high risk for complications.



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313 North Figueroa Street, Room 212 Los Angeles, California 90012

Selected Reportable Diseases (Cases) ¹ - Aug-Sept 2002										
	THIS PERIOD	D SAME PERIOD LAST YEAR	YEAR TO DATE		YEAR END TOTALS					
Disease	Aug-Sept 2002	Aug-Sept 2001	2002	2001	2001	2000	1999			
AIDS ²	389	212	1,391	928	1,415	1,652	1,876			
Amebiasis	22	30	88	93	136	116	142			
Campylobacteriosis	281	243	833	858	1,084	1,332	1,100			
Chlamydial Infections	5,985	4,995	25,760	24,905	32,784	30,642	27,561			
Encephalitis	14	5	52	33	44	51	7			
Gonorrhea	1,362	1,167	5,510	5,897	7,800	7,212	6,053			
Hepatitis Type A	88	98	382	418	517	1,025	1,258			
Hepatitis Type B, Acute	1	1	17	29	44	65	61			
Hepatitis Type C, Acute	0	0	0	1	1	28	21			
Measles	0	0	0	8	8	5	1			
Meningitis, viral/aseptic	177	109	498	402	534	491	390			
Meningococcal Infections	3	4	33	48	53	53	49			
Mumps	1	0	10	10	17	29	24			
Non-gonococcal Urethritis (NGU)	274	181	1,006	1,101	1,423	1,575	1,742			
Pertussis	11	15	85	65	103	102	238			
Rubella	0	0	0	0	0	3	0			
Salmonellosis	212	138	717	603	893	1,119	1,027			
Shigellosis	212	137	549	410	596	878	687			
Syphilis, primary & secondary	35	20	215	134	184	136	88			
Syphilis, early latent (<1 yr.)	45	28	215	148	209	194	335			
Tuberculosis	218	165	671	638	1,046	1,065	1,170			
Typhoid fever, Acute	10	4	28	17	24	25	16			

^{1.} Case totals are provisional and are subject to change following publication.

^{2.} Case totals are interim and may vary following periodic updates of the database.